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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,033	03/28/2002	Markus Antonietti	HUBR-1202	8924
24972	7590	03/22/2004	EXAMINER	
FULBRIGHT & JAWORSKI, LLP 666 FIFTH AVE NEW YORK, NY 10103-3198			YOON, TAE H	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,033

Applicant(s)

ANTONIETTI ET AL.

Examiner

Tae H Yoon

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1714

The specification is objected since a subsection title, Brief Descriptions of Drawings, is missing on page 10.

The recited "especially water or salts" in claim 29 is objected and a separate claim reciting such narrow limitation is suggested.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "nonaqueous miniemulsion" in claim 22 is confusing since said claim also recites employing an osmotically stabilizing component (such as water as seen in claim 29 and claim 32 wherein 0.1 to 40% by weight is taught) and since the water forms an aqueous composition. Also, the recited "inorganic polymerization" in claims 37 and 38 is confusing and indefinite since a formation of metal oxides from a metal precursor is not a polymerization, for example.

The examiner interprets that the instant nonaqueous miniemulsion encompasses an aqueous miniemulsion as long as said aqueous miniemulsion contains a nonaqueous fluid dispersing medium and since the use of water is claimed.

Art Unit: 1714

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22, 23, 28, 29, 37, 38 and 40-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Linehan et al (US 5,770,172).

Linehan et al teach a process for producing a nanometer-sized metal compound by a reverse micelle or reverse microemulsion system in the abstract and examples and col. 3, lines 1-26. Said microemulsion yielding a particle size of about 20 nm (col. 3, lines 55-60) meets the instant miniemulsion. The amount of surfactant and water and the use of non-polar solvents and additional reactants is taught at col. 4, line 33 to col. 5, line 32. Thus, the instant invention lacks novelty.

Claims 22-24 and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Candau et al (US 4,521,317).

Art Unit: 1714

Candau et al teach a microemulsion process at col. 3, lines 16-47 and in example 1 wherein a particle size of 3.8 nm is seen. Thus, the instant invention lacks novelty.

Claims 22-24, and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kozakiewicz et al (US 5,037,881).

Kozakiewicz et al teach a microemulsion process at col. 5, lines 45-65 and in example 1. Thus, the instant invention lacks novelty.

Claims 22-34 are rejected under 35 U.S.C. 103(a) as obvious over Jenkins et al (US 5,739,378) in view of Kozakiewicz et al (US 5,037,881) or Linehan et al (US 5,770,172).

Jenkins et al teach a process of making emulsion polymers in abstract and at col. 4, line 23 to col. 8, line 55 wherein various reactants and polymerization techniques are seen. Isocyanato and epoxy functional groups (col. 6, lines 1-3) and various reactions thereof (col. 8, lines 1-20) and inverse emulsion polymerization or non-aqueous dispersion polymerization (col. 8, lines 29-31) are taught.

The instant invention further recites a nonaqueous miniemulsion polymerization over Jenkins et al. However, said nonaqueous miniemulsion polymerization is well known as taught by Kozakiewicz et al and Linehan et al.

Art Unit: 1714

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known polymerization method of Kozakiewicz et al or Linehan et al in Jenkins et al since Jenkins et al teach the utilization of any art known polymerization technique and the use of various organic solvents is an obvious choice depending on the reactants used absent showing otherwise.

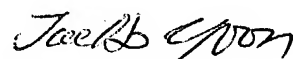
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat. 5,686,518 to Fontenot et al teach a miniemulsion in an aqueous continuous medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tae H Yoon
Primary Examiner
Art Unit 1714

THY/March 15, 2004